

High-Reliability Power Inductors ML528PJB



- High temperature materials allow operation in ambient temperatures up to 155°C.
- Special construction allows it to pass vibration testing to 30 G and shock testing to 100 G.

Core material Ferrite

Terminations Matte tin over nickel over silver.

Weight 0.82 – 1.25 g

Ambient temperature –55°C to +105°C with Irms current

Maximum part temperature +155°C (ambient + temp rise)

Storage temperature Component: –55°C to +155°C.

Tape and reel packaging: –55°C to +80°C

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Enhanced crush-resistant packaging 350/7" reel

Plastic tape: 12 mm wide, 0.3 mm thick, 8 mm pocket spacing, 3.68 mm pocket depth

Recommended pick and place nozzle OD: 6.2 mm; ID: ≤ 3.1 mm

Part number ¹	Inductance ² ± 20% (µH)	DCR (Ohms)		SRF typ (MHz)	Isat (A) ³			Irms (A) ⁴	
		typ	max		10% drop	20% drop	30% drop	20°C rise	40°C rise
ML528PJB682MR_	6.8	0.059	0.075	63	3.6	3.9	4.0	1.80	2.40
ML528PJB103MR_	10	0.073	0.090	49	2.8	3.2	3.3	1.55	2.15
ML528PJB153MR_	15	0.092	0.110	23	2.5	2.7	2.7	1.35	1.85
ML528PJB223MR_	22	0.102	0.130	21	2.0	2.3	2.4	1.25	1.75
ML528PJB333MR_	33	0.121	0.145	12	1.8	2.0	2.1	1.20	1.60
ML528PJB473MR_	47	0.153	0.179	10	1.6	1.7	1.8	1.10	1.50
ML528PJB683MR_	68	0.193	0.223	8.7	1.2	1.3	1.4	0.95	1.35
ML528PJB104MR_	100	0.297	0.342	6.5	1.0	1.1	1.1	0.78	1.10
ML528PJB154MR_	150	0.379	0.442	5.0	0.88	0.93	0.95	0.70	0.95
ML528PJB224MR_	220	0.564	0.662	4.3	0.70	0.74	0.77	0.60	0.82
ML528PJB334MR_	330	0.834	0.950	3.0	0.52	0.58	0.61	0.48	0.65
ML528PJB474MR_	470	1.28	1.45	2.5	0.43	0.48	0.50	0.39	0.53
ML528PJB684MR_	680	1.88	2.23	2.2	0.33	0.39	0.43	0.32	0.44
ML528PJB105MR_	1000	2.92	3.22	1.3	0.31	0.34	0.36	0.23	0.32

1. When ordering, please specify **testing** code:

ML528PJB105MRZ

Testing:

- Z** = Unscreened
- H** = Group A screening per Coilcraft CP-SA-10001
- N** = Group A screening per Coilcraft CP-SA-10004
- J** = Group A screening per Coilcraft CP-SA-10006
- T** = Screening per MIL-STD-981
- U** = Screening per EEE-INST-002
- F** = Screening per ESCC 3201

All screening performed to the document's latest revision

2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc.

3. DC current at 25°C that causes the specified inductance drop from its value without current.

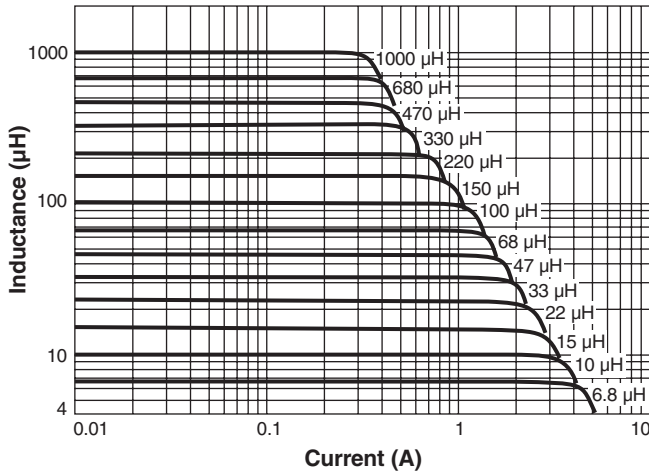
4. Current that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.

5. Electrical specifications at 25°C.

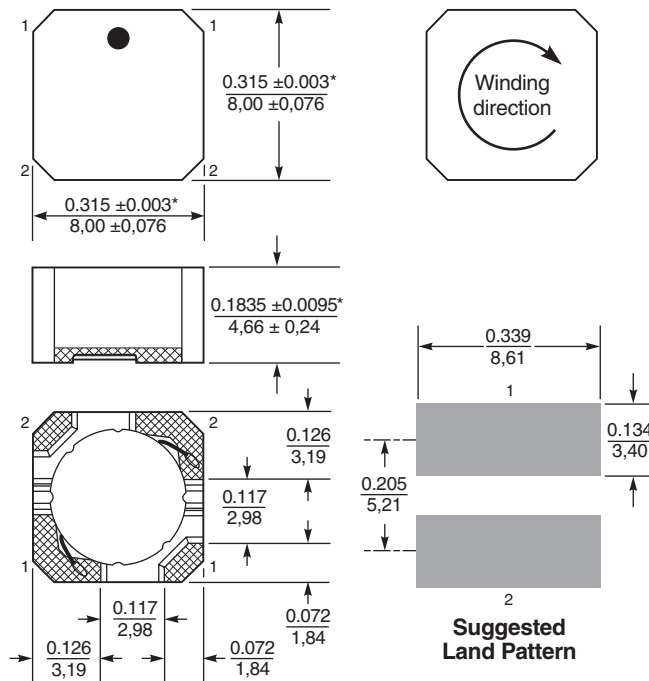
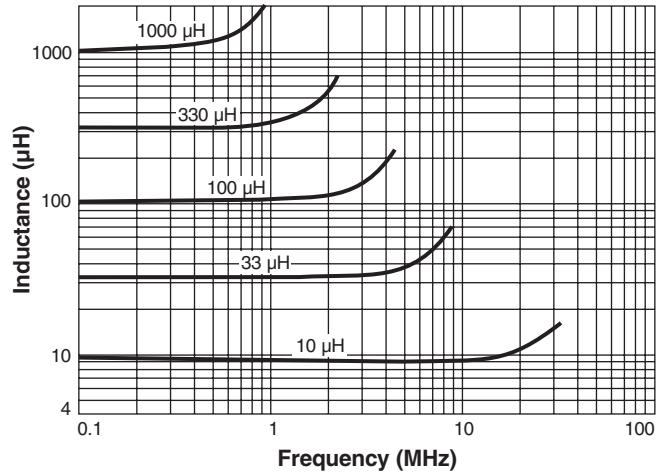
Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

ML528PJB Series (8045)

L vs Current



Typical L vs Frequency



* Dimensions are of the case not including the termination. For maximum overall dimensions including the termination, add 0.005 in / 0.13 mm.

Dimensions are in $\frac{\text{inches}}{\text{mm}}$

